

CLAIMS

1. A coating, comprising:

at least one hydrophobic filler; and *Silica*
a binder.

2. The coating according to Claim 1, wherein said hydrophobic filler is surface treated.

3. The coating according to Claim 1, wherein said hydrophobic filler comprises at least one filler particle having a surface treated with at least one selected from the group consisting of silicon oil, dimethylpolysiloxanes, $R_2R'Si-$, hexamethyl disilazane, octamethyl tetrasilane, $R_3Si-C_nH_{2n+1}$, trimethoxy octylsilane, polymethyl siloxanes, polymethyl siloxane emulsions, trimethyloxyhexadecyl silane, aminopropylsilane, vinylsilane, methacrylic silane, and combinations thereof, wherein in the formulas above, R is independently CH_3O- , C_2H_5O- , C_3H_7O- , or $Cl-$; R' is CH_3- , C_2H_5- ; and $n=1-18$.

4. The coating according to Claim 1, wherein said hydrophobic filler has a DBP uptake of 50-350 g/100 g.

5. The coating according to Claim 1, wherein the hydrophobic filler has a methanol wettability of 10-80%.

6. The coating according to Claim 1, wherein the hydrophobic filler has a carbon content of 0.1 to 5% by weight, based on the weight of the hydrophobic filler.

7. The coating according to Claim 1, wherein said hydrophobic filler has a surface area of 50-800 m^2/g .

8. The coating according to Claim 1, wherein said hydrophobic filler has a particle size of less than 15 μm .

9. The coating according to Claim 1, wherein said binder is a polymer selected from

the group consisting of polyamide, polyethylenimine, polyacrylamide, cationic-modified polyvinyl alcohol, polyvinyl alcohol, polyvinyl pyridine, amino-substituted polyacrylate, amino-substituted polyether, amino-substituted polyester, polyvinylpyrrolidone, vinyl acetate, poly(meth)acrylate, starch, cellulose, latex, copolymers thereof, and combinations thereof.

10. The coating according to Claim 1, wherein said binder is selected from the group consisting of polyvinyl alcohol, polyvinylpyrrolidone/vinyl acetate copolymer, and combinations thereof.

11. The coating according to Claim 1, wherein said binder is present in the coating in an amount ranging from 10-90 parts by weight, based on 100 parts by weight of the coating.

12. The coating according to Claim 1, comprising a solids content ranging from 2 to 40% by weight, based on the total weight of the coating.

13. The coating according to Claim 1, wherein said hydrophobic filler comprises one or more particles selected from the group consisting of silicas, colloidal silica, silica gel, precipitated silica, pyrogenic silica, silicates, calcium silicate, aluminum silicate, sodium aluminum silicate, aluminum polysilicate, naturally occurring pigments, synthetic pigments aluminum oxide, clay, bentonite, calcined clay, precipitated calcium carbonate, mica, montmorillonite, kaolinite, asbestos, talc, diatomaceous earth, vermiculite, natural and synthetic zeolites, cement, alumina silica gel, glass, and combinations thereof.

14. The coating according to Claim 1, wherein said hydrophobic filler comprises one or more particles selected from the group consisting of silica, colloidal silica, silica gel, precipitated silica, pyrogenic silica, silicate, calcium silicate, aluminum silicate, sodium aluminum silicate, aluminum polysilicate, and combinations thereof.

15. The coating according to Claim 1, wherein said hydrophobic filler comprises one or more particles selected from the group including silicas, colloidal silica, silica gel, precipitated silica and pyrogenic silica.

16. An inkjet media, comprising the coating according to Claim 1 coated on a substrate.

17. The inkjet media according to Claim 16, wherein said substrate is selected from the group consisting of plain paper, resin coated paper, cloth, wood, metal plates, films or sheets of polyester resins, diacetate resins, triacetate resins, acrylic resins, polycarbonate resins, polyvinyl chloride resins, polyimide resins, and combinations thereof.

18. The inkjet media according to Claim 16, wherein said substrate is transparent or opaque.

19. A method of inkjet printing, comprising inkjet printing at least one inkjet ink onto a substrate coated with the coating according to Claim 1.

20. A coating composition, comprising:
a hydrophobic filler comprising at least one filler particle and a means for making said particle hydrophobic; and
a means for binding said hydrophobic filler.

21. An inkjet media, comprising:
(a) a coating composition, comprising:
(i) a hydrophobic filler comprising at least one filler particle and a means for making said particle hydrophobic, and
(ii) a means for binding said hydrophobic filler; and
(b) a means for supporting said coating composition in contact with said coating composition.

22. A method for inkjet printing, comprising a step for inkjet printing onto an inkjet media, comprising:

(a) a coating composition, comprising:
(i) a hydrophobic filler comprising at least one filler particle and a means for making said particle hydrophobic, and

(ii) a means for binding said hydrophobic filler; and

(b) a means for supporting said coating composition in contact with said coating composition.

11. A method of forming a coating on a substrate, comprising:
12. applying a coating composition to the substrate;
13. drying the coating composition to form a dry coating;
14. applying a hydrophobic filler to the dry coating;
15. binding the hydrophobic filler to the dry coating;
16. supporting the dry coating and the hydrophobic filler in contact with the substrate.

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